

D6 (CN2477927Y):

Title of the Utility Model

Hot-Melt Pluggable Tube

Abstract

Disclosed in the present utility model is a hot-melt pluggable tube, which comprises a tube, a tube connector, a plastic bushing and a compensatory pad; the tube can be a metal composite tube or a plastic tube, of which the metal composite tube is of two layers with the outer layer being a metal outer tube and the inner layer being a plastic inner tube; the tube connector is also of two layers with the outer layer being a metal outer wall and the inner layer being a plastic inner wall; one end of the plastic bushing is plugged with the plastic inner tube of the metal composite tube, and another end thereof is plugged with the plastic inner wall of the tube connector; the compensatory pad is disposed on a boss of the plastic bushing at the junction between the metal composite tube and the tube connector. The present utility model pertains to a transport tube, and the plugging structure thereof employs the mode of hot melting, so that the tube and the tube connector are integrated together. The present utility model is simple in structure, convenient for assembly and operation, high in long-term connection strength, good in sealing effect, and applicable for surface transport tubes with plush appearance, and transport tubes that are built in walls or underground, or cannot be connected by means of threads or flanges.

Description

Referring to Fig. 1, the tube of the first embodiment according to the present utility model employs a metal composite tube, and consists of a metal composite tube 1, a tube connector 2, a plastic bushing 3 and a compensatory pad 4. The outer side of the metal composite tube 1 is a metal outer tube 10, and the inner side thereof is a plastic inner tube 5; the outer layer of the tube connector 2 is a metal outer wall 7, and an inner layer thereof is a plastic inner wall 6; an inner wall of the plastic inner tube 5 of the metal composite tube 1 is plugged in a hot-melting manner with an outer wall at one end of the plastic bushing, the plastic inner wall 6 of the tube connector 2 is plugged in a hot-melting manner with an outer wall at another end of the plastic bushing 3, and the compensatory pad 4 is disposed on a boss of the plastic bushing 3 at the junction between the metal composite tube 1 and the tube connector 2.

Referring to Fig. 2, the tube of the second embodiment according to the present utility model employs a metal composite tube, and consists of a metal composite tube 1 and a tube connector 2. The outer side of the metal

composite tube 1 is a metal outer tube 10, and the inner side thereof is a plastic inner tube 5; the outer layer of the tube connector 2 is a metal outer wall 7, and an inner layer thereof is a plastic inner wall 6; an annular slot 8 is disposed between the plastic inner wall 6 and the metal outer wall 7 of the tube connector 2, and an inner wall of the plastic inner tube 5 of the metal composite tube 1 is plugged in a hot-melting manner with the plastic wall of the annular slot 8.

Referring to Fig. 3, the tube of the third embodiment according to the present utility model employs a plastic tube, and consists of a plastic tube 9 and a tube connector 2. The outer layer of the tube connector 2 is a metal outer wall 7, and an inner layer thereof is a plastic inner wall 6. An outer wall of the plastic tube 9 is plugged in a hot-melting manner with the plastic inner wall 6 of the tube connector 2.

Referring to Fig. 4, the tube of the fourth embodiment according to the present utility model employs a metal composite tube, and consists of a metal composite tube 1 and a tube connector 2. The outer side of the metal composite tube 1 is a metal outer tube 10, and the inner side thereof is a plastic inner tube 5; the outer layer of the tube connector 2 is a metal outer wall 7, and an inner layer thereof is a plastic inner wall 6; one end of the metal composite tube 1 is removed of a certain size of the metal outer tube 10 by cutting, and the outer wall of the exposed plastic inner tube 5 is plugged in a hot-melting manner with the plastic inner wall 6 of the tube connector 2.

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## [12] 实用新型专利说明书

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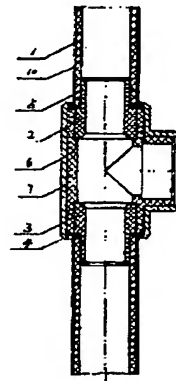
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[54] 实用新型名称 热熔插接管道

[57] 摘要

本实用新型公开了一种热熔插接管道,包括管道、管接头体、塑料衬套、补偿垫,管道可采用金属复合管或塑料管,金属复合管为双层,外层为金属外管,内层为塑料内管,管接头体同样为双层,外层为金属外壁,内层为塑料内壁,塑料衬套的一端与金属复合管的塑料内管相插接,其另一端与管接头体的塑料内壁相插接,金属复合管与管接头体连接处塑料衬套的凸台上设置补偿垫。本实用新型属于输送管道,插接的结构采用热熔方式,使管道和管接头体成为一体,结构简单、安装操作方便,长期使用连接强度高、密封效果好,适用于外表豪华的明装输送管道,及暗敷墙体、地下和不能采用丝扣或法兰连接的输送管道。



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参阅图 1，本实用新型实施例 1 中的管道采用金属复合管，它由金属复合管 1、管接头体 2、塑料衬套 3、补偿垫 4 组成，金属复合管 1 的外部为金属外管 10，内部为塑料内管 5，管接头体 2 的外层为金属外壁 7，内层为塑料内壁 6，金属复合管 1 的塑料内管 5 的内壁与塑料衬套 3 一端的外壁热熔插接，管接头体 2 的塑料内壁 6 与塑料衬套 3 另一端的外壁热熔插接，金属复合管 1 与管接头体 2 连接处塑料衬套 3 的凸台上设置补偿垫 4。

参阅图 2，本实用新型实施例 2 中的管道采用金属复合管，它由金属复合管 1、管接头体 2 组成，金属复合管 1 的外部为金属外管 10，内部为塑料内管 5，管接头体 2 的外层为金属外壁 7，内层为塑料内壁 6，管接头体 2 的塑料内壁 6 与金属外壁 7 之间设置环形插槽 8，金属复合管 1 的塑料内管 5 的内壁与环形插槽 8 的塑料壁热熔插接。

参阅图 3，本实用新型实施例 3 中的管道采用塑料管，它由塑料管 9、管接头体 2 组成，管接头体 2 的外层为金属外壁 7，内层为塑料内壁 6，塑料管 9 的外壁与管接头体 2 的塑料内壁 6 热熔插接。

参阅图 4，本实用新型实施例 4 中的管道采用金属复合管，它由金属复合管 1、管接头体 2 组成，金属复合管 1 的外部为金属外管 10，内部为塑料内管 5，管接头体 2 的外层为金属外壁 7，内层为塑料内壁 6，金属复合管 1 一端通过剪切去掉一定尺寸的金属外管 10，露出的塑料内管 5 的外壁与管接头体 2 塑料内壁 6 热熔插接。

